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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/719,425	11/21/2003	Jack W. Marple	SP-1754.1US	3401	
20875	7590 11/15/2006		EXAMINER		
MICHAEL C	C. POPHAL BATTERY COMPANY IN	r	RHEE, J	ANE J	
25225 DETRO		C	ART UNIT	PAPER NUMBER	
P O BOX 450	P O BOX 450777			1745	
WESTLAKE, OH 44145			DATE MAILED: 11/15/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
Office Action Summary		10/719,425	MARPLE, JACK W.			
		Examiner	Art Unit			
	·	Jane Rhee	1745			
The N	AILING DATE of this communication app					
Period for Reply	1					
WHICHEVER - Extensions of ti after SIX (6) MC - If NO period for - Failure to reply Any reply receive	IED STATUTORY PERIOD FOR REPLY R IS LONGER, FROM THE MAILING DA me may be available under the provisions of 37 CFR 1.13 DNTHS from the mailing date of this communication. reply is specified above, the maximum statutory period w within the set or extended period for reply will, by statute, yed by the Office later than three months after the mailing erm adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status						
1)⊠ Respo	nsive to communication(s) filed on 11 Se	eptember 2006.				
	This action is FINAL . 2b) ☐ This action is non-final.					
3)☐ Since t	· · · · · · · · · · · · · · · · · · ·					
closed	in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	63 O.G. 213.			
Disposition of C	claims ·					
·	s) <u>1-27 and 29</u> is/are pending in the app	lication.				
	4a) Of the above claim(s) is/are withdrawn from consideration.					
	s) is/are allowed.					
6)⊠ Claim(s) <u>1-27,29</u> is/are rejected.					
7) Claim(s) is/are objected to.		-			
8) Claim(s) are subject to restriction and/or	election requirement.				
Application Pap	ers					
	ecification is objected to by the Examine	_				
· <u> </u>	wing(s) filed on is/are: a)☐ acce		Evaminer			
	•					
	nt may not request that any objection to the openent drawing sheet(s) including the correction					
	h or declaration is objected to by the Ex					
Priority under 3		armior. Note the attached embe	7.0.0.7.0.7.7.7.7.0.2.			
<u> </u>	•					
	rledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a)	-(d) or (f).			
•	b) Some * c) None of:					
	1. Certified copies of the priority documents have been received.					
_	Certified copies of the priority documents					
	Copies of the certified copies of the prior	·	d in this National Stage			
	application from the International Bureau					
See uie	attached detailed Office action for a list	or the certified copies not receive	u.			
Attachment(s)						
	rences Cited (PTO-892)	4) Interview Summary	(PTO-413)			
2) 🔲 Notice of Draft	sperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ite			
	sclosure Statement(s) (PTO/SB/08) ail Date	5) Notice of Informal Page 1	atent Application			
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DETAILED ACTION

Rejections Repeated

1. The 35 U.S.C. 102(e)/103(a) rejection of claims 1-8,10-16,19-26 as being anticipated or obvious over Paulot et al. has been repeated for the reasons previously made in office action 6/1/2006.

- 2. The 35 U.S.C. 103(a) rejection of claim 9 unpatentable over Paulot et al. in view of Zhang et al. has been repeated for the reasons previously made in office action 6/1/2006.
- 3. The 35 U.S.C. 103(a) rejection of claim 17-18 unpatentable over Paulot et al. in view of Callahan et al. has been repeated for the reasons previously made in office action 6/1/2006.
- 4. The 35 U.S.C. 103(a) rejection of claim 27 unpatentable over Webber in view of Callahan et al. has been repeated for the reasons previously made in office action 6/1/2006.
- 5. The 35 U.S.C. 103(a) rejection of claim 29 unpatentable over Weber in view of Callahan et al. has been repeated for the reasons previously made in office action 6/1/2006.

As to the new limitation "the interfacial capacity of at least 720mAh/cm.sup.3" Webber discloses a metallic lithium anode material and an iron disulfide cathode active material (col. 3 line 46, col. 5 line 43). Since Webber discloses the same materials desired by the applicant, it is expected that the ratio of cathode interfacial capacity of an electrode assembly interfacial volume of at least 710 mAh/cm.sup.3

New Objection

6. The amendment filed 9/11/2006 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: that exceeded 170 degrees Celsius on the Impact Test.

Applicant is required to cancel the new matter in the reply to this Office Action.

Response to Arguments

7. Applicant's arguments filed 9/11/2006 have been fully considered but they are not persuasive.

In response to applicant's argument that Paulot et al. does not inherently disclose that the cell has a ratio of a cathode interfacial capacity to an electrode assembly interfacial volume of at least 710 mAh/cm^3, Paulot et al. discloses a metallic lithium anode material and an iron disulfide cathode active material (page 3 lines 18-20, page 4 line 28) as desired by the applicant. Applicant discloses in example 5 that the use of a thinner separator in Lot D allowed a 22% increase in cell interfacial capacity compared to Lot F. Lot D teaches a separator made from polyethylene with a thickness of 20um (see table 3 of applicant's spec.). Paulot et al. further discloses a polyethylene microporous membrane with an average thickness of less than 25um (page 4 paragraph 0023 and page 5 paragraph 0032) as desired by the applicant. Therefore, since Paulot et al. discloses the material desired by the applicant with a thickness of the

separator desired by the applicant, it is inherent that the cell has a ratio of a cathode interfacial capacity to an electrode assembly interfacial volume of at least 710 mAh/cm^3.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jane Rhee whose telephone number is 571-272-1499. The examiner can normally be reached on M-F 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jane Rhee

November 1,2006

PATRICK JOSEPH RYAN
SUPERVISORY PATENT EXAMINER